

WHAT IS CLAIMED IS:

1 1. A method for executing a group of commands on a content description
2 structure, the content description structure including a plurality of relationally related nodes,
3 in a computing environment comprising the steps of:

4 determining a dependency between commands in the group of commands
5 based on the relationally related plurality of nodes;

6 assigning one or more attribute tags to the group of commands, wherein
7 assigning one or more attribute tags comprises if commands in the group of commands are
8 determined to be dependent, assigning a sequential tag to the group of commands and if
9 commands in the group of commands are determined to be independent, assigning a parallel
10 tag to the group of commands;

11 executing the group of commands according to the one or more attribute tags,
12 wherein executing the group of commands comprises if the group of commands was assigned
13 the sequential tag, executing commands in the group of commands in sequence and if the
14 group of commands was assigned the parallel tag, executing commands in the group of
15 commands in parallel.

1 2. The method of claim 1, wherein assigning one or more attribute tags to
2 the group of commands comprises assigning a start time tag to the group of commands.

1 3. The method of claim 2, wherein executing the group of commands
2 according to the one or more attribute tags comprises executing the group of commands at the
3 start time.

1 4. The method of claim 2, wherein assigning one or more attribute tags to
2 the group of commands comprises assigning a duration time to the group of commands.

1 5. The method of claim 4, wherein executing the group of commands
2 according to the one or more attribute tags comprises executing the group of commands
3 during a time period starting at the start time and lasting until the start time plus the duration
4 time.

1 6. The method of claim 1, wherein assigning one or more attribute tags to
2 the group of commands comprises assigning an authority tag to the group of commands.

1 7. The method of claim 6, wherein executing the group of commands
2 according to the one or more attribute tags comprises skipping execution of the group of
3 commands if the authority level is low.

1 8. The method of claim 6, wherein executing the group of commands
2 according to the one or more attribute tags comprises executing the group of commands if the
3 authority level is high.

1 9. The method of claim 1, wherein assigning one or more attribute tags to
2 the group of commands comprises assigning a result tag to a group of commands.

1 10. The method of claim 9, further comprising saving a result of the
2 execution of the group of commands in a new file.

1 11. The method of claim 10, wherein assigning one or more attribute tags
2 to the group of commands comprises assigning a write tag to a group of commands, wherein
3 the write tag designates the new file.

1 12. The method of claim 9, further comprising overwriting an existing file
2 with a result of the execution of the group of commands.

1 13. The method of claim 1, wherein executing the group of commands
2 comprises executing adding, editing, and deleting commands on the content description
3 structure.

1 14. A system for executing commands in a computing environment
2 comprising:

3 a content description structure, wherein the content description structure
4 includes a plurality of relationally related nodes;

5 a group of commands, wherein commands in the group of commands have a
6 dependency based on the relationally related nodes;

7 one or more attribute tags, wherein the one or more attribute tags comprise a
8 sequential tag and parallel tag;

9 an encoder system comprising logic to encode a group of commands in the
10 one or more groups of commands with the one or more attribute tags, wherein the group of
11 commands is encoded with the sequential tag if the dependency of the group of commands is

12 dependent indicating the group of commands are to be executed in sequence and the group of
 13 commands is encoded with the parallel tag if the dependency of the group of commands is
 14 independent and indicates the group of commands are to be executed in parallel; and
 15 a decoder system comprising logic to execute the encoded group of commands
 16 according to the one or more attribute tags, wherein the group of commands encoded with the
 17 sequential tag are executed in sequence and the group of commands encoded with the parallel
 18 tag are executed in parallel.

1 15. The system of claim 14, wherein the one or more attribute tags
 2 comprise a start time tag, wherein the start time tag comprises a start time value.

1 16. The system of claim 15, wherein the encoder system encodes the group
 2 of commands with the start time tag, wherein the decoder system executes the group of
 3 commands at the start time value.

1 17. The system of claim 16, wherein the one or more attribute tags
 2 comprise a duration tag, wherein the duration tag comprises a duration value.

1 18. The system of claim 17, wherein the encoder system encodes the group
 2 of commands with the duration tag, wherein the decoder system executes the group of
 3 commands during a time period defined by the start time value and the start time value plus
 4 the duration value.

1 19. The system of claim 14, wherein the one or more attribute tags
 2 comprise an authority level tag, wherein the authority level tag comprises an authority level
 3 value.

1 20. The system of claim 19, wherein the encoder system encodes the group
 2 of commands with the authority level tag.

1 21. The system of claim 20, wherein the decoder system does not execute
 2 the group of commands if the authority level value is low.

1 22. The system of claim 20, wherein the decoder system executes the
 2 group of commands if the authority level value is high.

1 23. The system of claim 14, wherein the one or more attribute tags
 2 comprise a result tag, wherein the result tag comprises a new file value and overwrite value.

